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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/684,705	10/15/2003	Takeshi Ohkubo	Q77937	3649
23373 7590 09/20/2007 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			EXAMINER SUNG, CHRISTINE	
			ART UNIT 2884	PAPER NUMBER
			MAIL DATE 09/20/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<p align="center"><b>Office Action Summary</b></p>	<p>Application No.</p> <p align="center">10/684,705</p>	<p>Applicant(s)</p> <p align="center">OHKUBO, TAKESHI</p>	
	<p>Examiner</p> <p align="center">Christine Sung</p>	<p>Art Unit</p> <p align="center">2884</p>	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 July 2007 and 14 June 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***Response to Amendment***

1. The amendment filed on 6/14/2007 has been accepted and entered.
2. The request for continued examination filed on 7/17/2007 has been accepted and entered.

***Claim Objections***

3. Claims 20-23 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claims 20-23 disclose that the handheld portable operating portion fits within an operator's hand. Applicant does not define the term "handheld," thus the examiner has applied plain dictionary meaning disclosed by Merriam Webster; "designed to be operated while being held in the hand." Thus, the limitation recited in claims 20-23 do not further limit their respective parent claims.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-17 and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ivan (US Patent 5,877,501 A).

Regarding claims 1, 15, 17 and 20-21 Ivan discloses a radiation detecting cassette (Figure 2) comprising:

a solid state radiation detector (element 10) for detecting radiation bearing image information and outputting an image signal representing a radiation image (element 26, 30 and 32);

a control means for controlling the operations of the solid state radiation detector (element 38);

a cassette main body having a case for housing the solid state radiation detector and the control means (element 1);

and a portable operating portion (element 50) for outputting command signals to the control means for operating the solid state radiation detector, formed as a separate unit from the cassette main body.

Ivan discloses the claimed invention but does not explicitly state that the operating portion is used in a handheld manner. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have made the operating portion a portable handheld device, since it has been held that making an old device portable or moveable without producing any new and unexpected result involves only routine skill in the art. *In re Lindberg* 93 USPQ 23 (CCPA 1952). Further, it is well known that as electronic device components shrink in size (i.e. memory, battery, processors, etc), the overall size of the device decreases. Thus it would have been obvious to one having ordinary skill in the art at the time the invention was made to have made the operating portion disclosed by Ivan, a handheld operating portion, in order to take advantage of the decrease in size of the device and the desire to reduce the size of electronic devices.

Regarding claim 2, Ivan discloses the operating portion (element 50) further comprises a display portion (display screen of a PC) for displaying the contents of the command signals.

Regarding claim 3, Ivan discloses that the operating portion (element 50) further comprises an information receiving means (element 33 to element 50) for receiving information output from the cassette main body;

and the display portion displays the information received by the information receiving means (display screen of a PC).

Regarding claim 4, Ivan discloses that the information receiving means receives information representing an operating state (i.e. status display, element 40) of the solid state radiation detector;

and the display portion displays the operating state of the solid state radiation detector (element 50).

Regarding claim 5-6 and 16, Ivan discloses that the information receiving means (element 33) receives the image signal output from the solid state radiation detector (element 26, 30 and 32);

and the display portion displays an image based on the image signal (element 50, display screen of a PC).

Regarding claims 7-12, Ivan discloses the operating portion is irremovably attachable to the case (see where elements 42 and 48 meet and where elements 34 and 46 meet).

Regarding claim 13, Ivan discloses information relating to reading the solid state radiation detector to record a radiation image (status display, element 40). And further discloses information relating to reading the solid state detector to read out a radiation image therefrom (column 4 lines 16-19).

Regarding claim 14, Ivan does not explicitly state the claimed command signals, however such information is conventional information generated by radiation images.

Image grade, image frequency, image density, image contrast, image noise, grid pattern, energy subtraction and time lapse from drug administration are all known factors that affect image quality, thus it would be obvious to one having ordinary skill in the art at the time the invention was made to account for all of these factors in order to reduce errors attributed to these factors, thus increasing the quality and accuracy of the image detected.

6. Claims 18-19 and 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ivan (US Patent 5,877,501 A) in view of Jeromin (US Patent 5,661,309).

Regarding claims 18-19 and 22-23 Ivan discloses a radiation detecting cassette (Figure 2) comprising:

a solid state radiation detector (element 10) for detecting radiation bearing image information and outputting an image signal representing a radiation image (element 26, 30 and 32);

a control means for controlling the operations of the solid state radiation detector (element 38);

a cassette main body having a case for housing the solid state radiation detector and the control means (element 1);

and a portable operating portion (element 50) for outputting command signals to the control means for operating the solid state radiation detector, formed as a separate unit from the cassette main body.

Ivan discloses the claimed invention but does not explicitly state that the operating portion is used in a handheld manner. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have made the operating portion a portable handheld device, since it has been held that making an old device portable or moveable without producing any new and unexpected result involves only routine skill in the art. *In re Lindberg* 93 USPQ 23 (CCPA 1952). Further, it is well known that as electronic device components shrink in size (i.e. memory, battery, processors, etc), the overall size of the device decreases. Thus it would have been obvious to one having ordinary skill in the art at the time the invention was made to have made the operating portion disclosed by Ivan, a handheld operating portion, in order to take advantage of the decrease in size of the device and the desire to reduce the size of electronic devices.

Ivan further does not disclose that the handheld portable operating portion is precluded from outputting command signals during a period of time from reception of data indicating performance of one of a recording operation and a readout operation to data indicating that the one of the recording operation and readout operation is complete.

However, Jeromin discloses an indicator (element 66) that indicates times when the detector is accessible/ready for use. The indicator does not light up during recording or readout,

and thus precludes an operator from inputting commands during those periods. Thus it would have been obvious to one having ordinary skill in the art, at the time the invention was made, to have modified the invention as disclosed by Ivan with the indicator as disclosed by Jeromin in order to reduce errors or reduce the probability of accidental erasure during imaging and/or readout.

### *Response to Arguments*

7. Applicant's arguments filed 7/17/07 have been fully considered but they are not persuasive.

Applicant argues that the “handheld” feature of the operating portion recites a structural feature. The limitation has been addressed in the above rejection.

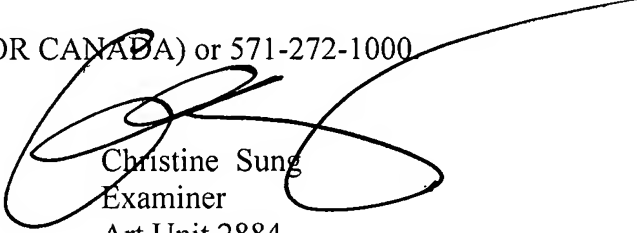
### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine Sung whose telephone number is 571-272-2448. The examiner can normally be reached on Monday- Friday 9-5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Porta can be reached on 571-272-2444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Christine Sung  
Examiner  
Art Unit 2884

CS